SUBJECT INDEX

Absorption

Durability of Rock as Function of Grain Size, Pore Size, and Rate of Capillary Absorption of Water, Peter P. Hudec, MT Feb. 89 p3-9.

Adhesive bonding

Effect of Contaminants and Cure Time on EPDM Single-ply Joint Strength, Jonathan W. Martin and Edward Embree, MT Aug. 89 p151-166.

Admixtures

Curing Effects, Strength and Physical Properties of High Strength Silica Fume Concretes, Arnon Bentur and Ariel Goldman, MT Feb. 89 p46-58.

Aggregates

Setting Stresses in Polymer Compos[illegible] with Multiple-Size Particles, A. M. Boriek, J. E. Akin and C. D. Armeniades, MT Nov. 89 p217-236.

Aging

Effect of Early Freezing on Permeability of Cement Paste, Nemkumar Banthia and Sidney Mindess, MT Aug. 89 p119-132.

Air entrainment

Freeze-Thaw Deterioration of Concrete Pavements, Dan F. Adkins and Vance T. Christiansen, MT May 89 p97-104.

Air pollution

Kinetics of Reaction of SO_2 with Marble, Niraj P. Kulshreshtha, Adinarayana R. Punuru and K. Lal Gauri, MT May 89 p60-72.

Blistering

Blistering of Membranes Over Foam-Concrete Roofs, Chanoch Jaegermann, Moshe Puterman and Eitan Haviv, MT Feb. 89 p31-45.

Bridge decks

Concrete Degradation Due to Thermal Incompatibility of Its Components, M. H. Baluch, L. A. R. Al-Nour, A. K. Azad, M. Y. Al-Mandil, A. M. Sharif and D. Pearson-Kirk, MT Aug. 89 p105-118.

Cement paste

Effect of Early Freezing on Permeability of Cement Paste, Nemkumar Banthia and Sidney Mindess, MT Aug. 89 p119-132.

Strength and Porosity of Portland Cement Paste Subjected to Chloride Penetration, O. A. Kayyali, MT Feb. 89 p10-18.

Cements

Effect of Early Freezing on Permeability of Cement Paste, Nemkumar Banthia and Sidney Mindess, MT Aug. 89 p119-132.

Fold and Bond Construction of Cement Laminate Structural Shapes, Robert Nicholls and Vistasp Karbhari, MT Aug. 89 p133-150.

Silica Fume Treatments as Means for Improving Durability of Glass Fiber Reinforced Cements, Arnon Bentur, MT Aug. 89 p167-183.

Chlorides

Concrete Degradation Due to Thermal Incompatibility of Its Components, M. H. Baluch, L. A. R. Al-Nour, A. K. Azad, M. Y. Al-Mandil, A. M. Sharif and D. Pearson-Kirk, MT Aug. 89 p105-118.

Strength and Porosity of Portland Cement Paste Subjected to Chloride Penetration, O. A. Kayyali, MT Feb. 89 p10-18.

Composite materials

Setting Stresses in Polymer Composites with Multiple-Size Particles, A. M. Boriek, J. E. Akin and C. D. Armeniades, MT Nov. 89 p217-236.

Concrete

Blistering of Membranes Over Foam-Concrete Roofs, Chanoch Jaegermann, Moshe Puterman and Eitan Haviv, MT Feb. 89 p31-45.

Concrete Degradation Due to Thermal Incompatibility of Its Components, M. H. Baluch, L. A. R. Al-Nour, A. K. Azad, M. Y. Al-Mandil, A. M. Sharif and D. Pearson-Kirk, MT Aug. 89 p105-118.

Constitutive Modeling of Concrete by Using Nonassociated Plasticity, Hsuan-Teh Hu and William C. Schnobrich, MT Nov. 89 p199-216.

Curing Effects, Strength and Physical Properties of High Strength Silica Fume Concretes, Arnon Bentur and Ariel Goldman, MT Feb. 89 p46-58.

Durability of Rock as Function of Grain Size, Pore Size, and Rate of Capillary Absorption of Water, Peter P. Hudec, MT Feb. 89 p3-9.

Fracture Mechanics Analysis of High-Strength Concrete, Reji John and Surendra P. Shah, MT Nov. 89 p185-198.

Marine Curing of Steel Fiber Composites, Nemkumar Banthia and Christiane Foy, MT May 89 p86-96.

Concrete deterioration

Freeze-Thaw Deterioration of Concrete Pavements, Dan F. Adkins and Vance T. Christiansen, MT May 89 p97-104.

Concrete durability

Freeze-Thaw Deterioration of Concrete Pavements, Dan F. Adkins and Vance T. Christiansen, MT May 89 p97-104.

Concrete pavements

Freeze-Thaw Deterioration of Concrete Pavements, Dan F. Adkins and Vance T. Christiansen, MT May 89 p97-104.

Constitutive models

Constitutive Modeling of Concrete by Using Nonassociated Plasticity, Hsuan-Teh Hu and William C. Schnobrich, MT Nov. 89 p199-216.

Corrosion

Concrete Degradation Due to Thermal Incompatibility of Its Components, M. H. Baluch, L. A. R. Al-Nour, A. K. Azad, M. Y. Al-Mandil, A. M. Sharif and D. Pearson-Kirk, MT Aug. 89 p105-118.

Kinetics of Reaction of SO_2 with Marble, Niraj P. Kulshreshtha, Adinarayana R. Punuru and K. Lal Gauri, MT May 89 p60-72.

Marine Curing of Steel Fiber Composites, Nemkumar Banthia and Christiane Foy, MT May 89 p86-96.

Curing

Curing Effects, Strength and Physical Properties of High Strength Silica Fume Concretes, Arnon Bentur and Ariel Goldman, MT Feb. 89 p46-58.

Marine Curing of Steel Fiber Composites, Nemkumar Banthia and Christiane Foy, MT May 89 p86-96.

Deicing

Freeze-Thaw Deterioration of Concrete Pavements, Dan F. Adkins and Vance T. Christiansen, MT May 89 p97-104.

Deterioration

Rate of Decay of Marble in Laboratory and Outdoor Exposure, K. Lal Gauri, Niraj P. Kulshreshtha, Adinarayana R. Punuru and Ahad N. Chowdhury, MT May 89 p73-85.

Douglas fir

Further Studies on Elastic Propertie of Douglas Fir, Clinton Woodward and John Minor, MT Feb. 89 p19-30.

Economic feasibility

Fracture Mechanics Analysis of High-Strength Concrete, Reji John and Surendra P. Shah, MT Nov. 89 p185-198.

Elastic properties

Further Studies on Elastic Propertie of Douglas Fir, Clinton Woodward and John Minor, MT Feb. 89 p19-30.

Elastomer

Effect of Contaminants and Cure Time on EPDM Single-ply Joint Strength, Jonathan W. Martin and Edward Embree, MT Aug. 89 p151-166.

Fabrics

Fold and Bond Construction of Cement Laminate Structural Shapes, Robert Nicholls and Vistasp Karbhari, MT Aug. 89 p133-150.

Failure mode

Effect of Contaminants and Cure Time on EPDM Single-ply Joint Strength, Jonathan W. Martin and Edward Embree, MT Aug. 89 p151-166.

Failures

Concrete Degradation Due to Thermal Incompatibility of Its Components, M. H. Baluch, L. A. R. Al-Nour, A. K. Azad, M. Y. Al-Mandil, A. M. Sharif and D. Pearson-Kirk, MT Aug. 89 p105-118.

Effect of Contaminants and Cure Time on EPDM Single-ply Joint Strength, Jonathan W. Martin and Edward Embree, MT Aug. 89 p151-166.

Fiber composites

Marine Curing of Steel Fiber Composites, Nemkumar Banthia and Christiane Foy, MT May 89 p86-96.

Fibers

Marine Curing of Steel Fiber Composites, Nemkumar Banthia and Christiane Foy, MT May 89 p86-96.

Finite element method

Constitutive Modeling of Concrete by Using Nonassociated Plasticity, Hsuan-Teh Hu and William C. Schnobrich, MT Nov. 89 p199-216.

Foam

Blistering of Membranes Over Foam-Concrete Roofs, Chanoch Jaegermann, Moshe Puterman and Eitan Haviv, MT Feb. 89 p31-45.

Folded plates

Fold and Bond Construction of Cement Laminate Structural Shapes, Robert Nicholls and Vistasp Karbhari, MT Aug. 89 p133-150.

Fracture mechanics

Fracture Mechanics Analysis of High-Strength Concrete, Reji John and Surendra P. Shah, MT Nov. 89 p185-198.

Freeze-thaw cycle

Freeze-Thaw Deterioration of Concrete Pavements, Dan F. Adkins and Vance T. Christiansen, MT May 89 p97-104.

Freeze-thaw durability

Durability of Rock as Function of Grain Size, Pore Size, and Rate of Capillary Absorption of Water, Peter P. Hudec, MT Feb. 89 p3-9.

Freeze-Thaw Deterioration of Concrete Pavements, Dan F. Adkins and Vance T. Christiansen, MT May 89 p97-104.

Freezing

Effect of Early Freezing on Permeability of Cement Paste, Nemkumar Banthia and Sidney Mindess, MT Aug. 89 p119-132.

Glass fibers

Silica Fume Treatments as Means for Improving Durability of Glass Fiber Reinforced Cements, Arnon Bentur, MT Aug. 89 p167-183.

Grain size

Durability of Rock as Function of Grain Size, Pore Size, and Rate of Capillary Absorption of Water, Peter P. Hudec, MT Feb. 89 p3-9.

High strength concrete

Fracture Mechanics Analysis of High-Strength Concrete, Reji John and Surendra P. Shah, MT Nov. 89 p185-198.

Impervious membranes

Blistering of Membranes Over Foam-Concrete Roofs, Chanoch Jaegermann, Moshe Puterman and Eitan Haviv, MT Feb. 89 p31-45.

Inelastic action

Constitutive Modeling of Concrete by Using Nonassociated Plasticity, Hsuan-Teh Hu and William C. Schnobrich, MT Nov. 89 p199-216.

Joints

Effect of Contaminants and Cure Time on EPDM Single-ply Joint Strength, Jonathan W. Martin and Edward Embree, MT Aug. 89 p151-166.

Kinetics

Kinetics of Reaction of SO_2 with Marble, Niraj P. Kulshreshtha, Adinarayana R. Punuru and K. Lal Gauri, MT May 89 p60-72.

Rate of Decay of Marble in Laboratory and Outdoor Exposure, K. Lal Gauri, Niraj P. Kulshreshtha, Adinarayana R. Punuru and Ahad N. Chowdhury, MT May 89 p73-85.

Laborstory tests

Silica Fume Treatments as Means for Improving Durability of Glass Fiber Reinforced Cements, Arnon Bentur, MT Aug. 89 p167-183.

Laminates

Fold and Bond Construction of Cement Laminate Structural Shapes, Robert Nicholls and Vistasp Karbhari, MT Aug. 89 p133-150.

Marble

Kinetics of Reaction of SO_2 with Marble, Niraj P. Kulshreshtha, Adinarayana R. Punuru and K. Lal Gauri, MT May 89 p60-72.

Rate of Decay of Marble in Laboratory and Outdoor Exposure, K. Lal Gauri, Niraj P. Kulshreshtha, Adinarayana R. Punuru and Ahad N. Chowdhury, MT May 89 p73-85.

Mechanics

Setting Stresses in Polymer Composites with Multiple-Size Particles, A. M. Boriek, J. E. Akin and C. D. Armeniades, MT Nov. 89 p217-236.

Membranes

Blistering of Membranes Over Foam-Concrete Roofs, Chanoch Jaegermann, Moshe Puterman and Eitan Haviv, MT Feb. 89 p31-45.

Models

Fracture Mechanics Analysis of High-Strength Concrete, Reji John and Surendra P. Shah, MT Nov. 89 p185-198.

Modulus of elasticity

Further Studies on Elastic Propertie of Douglas Fir, Clinton Woodward and John Minor, MT Feb. 89 p19-30.

Orthotropic

Further Studies on Elastic Propertie of Douglas Fir, Clinton Woodward and John Minor, MT Feb. 89 p19-30.

Particle size

Setting Stresses in Polymer Composites with Multiple-Size Particles, A. M. Boriek, J. E. Akin and C. D. Armeniades, MT Nov. 89 p217-236.

Particulate media

Effect of Contaminants and Cure Time on EPDM Single-ply Joint Strength, Jonathan W. Martin and Edward Embree, MT Aug. 89 p151-166.

Permeability

Effect of Early Freezing on Permeability of Cement Paste, Nemkumar Banthia and Sidney Mindess, MT Aug. 89 p119-132.

Physical properties

Curing Effects, Strength and Physical Properties of High Strength Silica Fume Concretes, Arnon Bentur and Ariel Goldman, MT Feb. 89 p46-58.

Effect of Contaminants and Cure Time on EPDM Single-ply Joint Strength, Jonathan W. Martin and Edward Embree, MT Aug. 89 p151-166.

Effect of Early Freezing on Permeability of Cement Paste, Nemkumar Banthia and Sidney Mindess, MT Aug. 89 p119-132.

Fold and Bond Construction of Cement Laminate Structural Shapes, Robert Nicholls and Vistasp Karbhari, MT Aug. 89 p133-150.

Fracture Mechanics Analysis of High-Strength Concrete, Reji John and Surendra P. Shah, MT Nov. 89 p185-198.

Plasticity

Constitutive Modeling of Concrete by Using Nonassociated Plasticity, Hsuan-Teh Hu and William C. Schnobrich, MT Nov. 89 p199-216.

Plastics

Effect of Contaminants and Cure Time on EPDM Single-ply Joint Strength, Jonathan W. Martin and Edward Embree, MT Aug. 89 p151-166.

Poisson ratio

Further Studies on Elastic Propertie of Douglas Fir, Clinton Woodward and John Minor, MT Feb. 89 p19-30.

Polymers

Setting Stresses in Polymer Composites with Multiple-Size Particles, A. M. Boriek, J. E. Akin and C. D. Armeniades, MT Nov. 89 p217-236.

Porosity

Durability of Rock as Function of Grain Size, Pore Size, and Rate of Capillary Absorption of Water, Peter P. Hudec, MT Feb. 89 p3-9.

Strength and Porosity of Portland Cement Paste Subjected to Chloride Penetration, O. A. Kayyali, MT Feb. 89 p10-18.

Pull-out resistance

Marine Curing of Steel Fiber Composites, Nemkumar Banthia and Christiane Foy, MT May 89 p86-96.

Reinforcement

Silica Fume Treatments as Means for Improving Durability of Glass Fiber Reinforced Cements, Arnon Bentur, MT Aug. 89 p167-183.

Resins

Setting Stresses in Polymer Composites with Multiple-Size Particles, A. M. Boriek, J. E. Akin and C. D. Armeniades, MT Nov. 89 p217-236.

Reversing flow

Effect of Early Freezing on Permeability of Cement Paste, Nemkumar Banthia and Sidney Mindess, MT Aug. 89 p119-132.

Roofs

Blistering of Membranes Over Foam-Concrete Roofs, Chanoch Jaegermann, Moshe Puterman and Eitan Haviv, MT Feb. 89 p31-45.

Effect of Contaminants and Cure Time on EPDM Single-ply Joint Strength, Jonathan W. Martin and Edward Embree, MT Aug. 89 p151-166.

Salts

Freeze-Thaw Deterioration of Concrete Pavements, Dan F. Adkins and Vance T. Christiansen, MT May 89 p97-104.

Salts effects

Freeze-Thaw Deterioration of Concrete Pavements, Dan F. Adkins and Vance T. Christiansen, MT May 89 p97-104.

Shear modules

Further Studies on Elastic Propertie of Douglas Fir, Clinton Woodward and John Minor, MT Feb. 89 p19-30.

Silica

Curing Effects, Strength and Physical Properties of High Strength Silica Fume Concretes, Arnon Bentur and Ariel Goldman, MT Feb. 89 p46-58.

Silica Fume Treatments as Means for Improving Durability of Glass Fiber Reinforced Cements, Arnon Bentur, MT Aug. 89 p167-183.

Size effect

Setting Stresses in Polymer Composites with Multiple-Size Particles, A. M. Boriek, J. E. Akin and C. D. Armeniades, MT Nov. 89 p217-236.

Spalling

Freeze-Thaw Deterioration of Concrete Pavements, Dan F. Adkins and Vance T. Christiansen, MT May 89 p97-104.

Strength

Curing Effects, Strength and Physical Properties of High Strength Silica Fume Concretes, Arnon Bentur and Ariel Goldman, MT Feb. 89 p46-58.

Strength and Porosity of Portland Cement Paste Subjected to Chloride Penetration, O. A. Kayyali, MT Feb. 89 p10-18.

Stress

Setting Stresses in Polymer Composites with Multiple-Size Particles, A. M. Boriek, J. E. Akin and C. D. Armeniades, MT Nov. 89 p217-236.

Structures

Effect of Early Freezing on Permeability of Cement Paste, Nemkumar Banthia and Sidney Mindess, MT Aug. 89 p119-132.

Fold and Bond Construction of Cement Laminate Structural Shapes, Robert Nicholls and Vistasp Karbhari, MT Aug. 89 p133-150.

Fracture Mechanics Analysis of High-Strength Concrete, Reji John and Surendra P. Shah, MT Nov. 89 p185-198.

Setting Stresses in Polymer Composites with Multiple-Size Particles, A. M. Boriek, J. E. Akin and C. D. Armeniades, MT Nov. 89 p217-236.

Silica Fume Treatments as Means for Improving Durability of Glass Fiber Reinforced Cements, Arnon Bentur, MT Aug. 89 p167-183.

Sulfur dioxide

Kinetics of Reaction of SO_2 with Marble, Niraj P. Kulshreshtha, Adinarayana R. Punuru and K. Lal Gauri, MT May 89 p60-72.

Rate of Decay of Marble in Laboratory and Outdoor Exposure, K. Lal Gauri, Niraj P. Kulshreshtha, Adinarayana R. Punuru and Ahad N. Chowdhury, MT May 89 p73-85.

Surface defects

Effect of Contaminants and Cure Time on EPDM Single-ply Joint Strength, Jonathan W. Martin and Edward Embree, MT Aug. 89 p151-166.

Temperature

Marine Curing of Steel Fiber Composites, Nemkumar Banthia and Christiane Foy, MT May 89 p86-96.

Thermal factors

Concrete Degradation Due to Thermal Incompatibility of Its Components, M. H. Baluch, L. A. R. Al-Nour, A. K. Azad, M. Y. Al-Mandil, A. M. Sharif and D. Pearson-Kirk, MT Aug. 89 p105-118.

Thermodynamics

Rate of Decay of Marble in Laboratory and Outdoor Exposure, K. Lal Gauri, Niraj P. Kulshreshtha, Adinarayana R. Punuru and Ahad N. Chowdhury, MT May 89 p73-85.

Toughness

Silica Fume Treatments as Means for Improving Durability of Glass Fiber Reinforced Cements, Arnon Bentur, MT Aug. 89 p167-183.

Weathering

Kinetics of Reaction of SO_2 with Marble, Niraj P. Kulshreshtha, Adinarayana R. Punuru and K. Lal Gauri, MT May 89 p60-72.

Rate of Decay of Marble in Laboratory and Outdoor Exposure, K. Lal Gauri, Niraj P. Kulshreshtha, Adinarayana R. Punuru and Ahad N. Chowdhury, MT May 89 p73-85.

AUTHOR INDEX

Adkins, Dan F.
Freeze-Thaw Deterioration of Concrete Pavements, with Vance T. Christiansen, MT May 89, p97-104

Akin, J. E.
see Boriek, A. M., MT Nov. 89, p217-236

Al-Mandil, M. Y.
see Baluch, M. H., MT Aug. 89, p105-118

Al-Nour, L. A. R.
see Baluch, M. H., MT Aug. 89, p105-118

Armeniades, C. D.
see Boriek, A. M., MT Nov. 89, p217-236

Azad, A. K.
see Baluch, M. H., MT Aug. 89, p105-118

Baluch, M. H.
Concrete Degradation Due to Thermal Incompatibility of Its Components, with L. A. R. Al-Nour, A. K. Azad, M. Y. Al-Mandil, A. M. Sharif and D. Pearson-Kirk, MT Aug. 89, p105-118

Banthia, Nemkumar
Effect of Early Freezing on Permeability of Cement Paste, with Sidney Mindess, MT Aug. 89, p119-132
Marine Curing of Steel Fiber Composites, with Christiane Foy, MT May 89, p86-96

Bentur, Arnon
Curing Effects, Strength and Physical Properties of High Strength Silica Fume Concretes, with Ariel Goldman, MT Feb. 89, p46-58
Silica Fume Treatments as Means for Improving Durability of Glass Fiber Reinforced Cements, MT Aug. 89, p167-183

Boriek, A. M.
Setting Stresses in Polymer Composites with Multiple-Size Particles, with J. E. Akin and C. D. Armeniades, MT Nov. 89, p217-236

Chowdhury, Ahad N.
see Gauri, K. Lal, MT May 89, p73-85

Christiansen, Vance T.
see Adkins, Dan F., MT May 89, p97-104

Embree, Edward
see Martin, Jonathan W., MT Aug. 89, p151-166

Foy, Christiane
see Banthia, Nemkumar, MT May 89, p86-96

Gauri, K. Lal
Rate of Decay of Marble in Laboratory and Outdoor Exposure, with Niraj P. Kulshreshtha, Adinarayana R. Punuru and Ahad N. Chowdhury, MT May 89, p73-85
see Kulshreshtha, Niraj P., MT May 89, p60-72

Goldman, Ariel
see Bentur, Arnon, MT Feb. 89, p46-58

Haviv, Eitan
see Jaegermann, Chanoch, MT Feb. 89, p31-45

Hu, Hsuan-Teh
Constitutive Modeling of Concrete by Using Nonassociated Plasticity, with William C. Schnobrich, MT Nov. 89, p199-216

Hudec, Peter P.
Durability of Rock as Function of Grain Size, Pore Size, and Rate of Capillary Absorption of Water, MT Feb. 89, p3-9

Jaegermann, Chanoch
Blistering of Membranes Over Foam-Concrete Roofs, with Moshe Puterman and Eitan Haviv, MT Feb. 89, p31-45

John, Reji
Fracture Mechanics Analysis of High-Strength Concrete, with Surendra P. Shah, MT Nov. 89, p185-198

Karbhari, Vistasp
see Nicholls, Robert, MT Aug. 89, p133-150

Kayyali, O. A.
Strength and Porosity of Portland Cement Paste Subjected to Chloride Penetration, MT Feb. 89, p10-18

Kulshreshtha, Niraj P.
Kinetics of Reaction of SO_2 with Marble, with Adinarayana R. Punuru and K. Lal Gauri, MT May 89, p60-72
see Gauri, K. Lal, MT May 89, p73-85

Martin, Jonathan W.
Effect of Contaminants and Cure Time on EPDM Single-ply Joint Strength, with Edward Embree, MT Aug. 89, p151-166

Mindess, Sidney
see Banthia, Nemkumar, MT Aug. 89, p119-132

Minor, John
see Woodward, Clinton, MT Feb. 89, p19-30

Nicholls, Robert
Fold and Bond Construction of Cement Laminate Structural Shapes, with Vistasp Karbhari, MT Aug. 89, p133-150

Pearson-Kirk, D.
see Baluch, M. H., MT Aug. 89, p105-118

Punuru, Adinarayana R.
see Gauri, K. Lal, MT May 89, p73-85
see Kulshreshtha, Niraj P., MT May 89, p60-72

Puterman, Moshe
see Jaegermann, Chanoch, MT Feb. 89, p31-45

Schnobrich, William C.
see Hu, Hsuan-Teh, MT Nov. 89, p199-216

Shah, Surendra P.
see John, Reji, MT Nov. 89, p185-198

Sharif, A. M.
see Baluch, M. H., MT Aug. 89, p105-118

Woodward, Clinton
Further Studies on Elastic Propertie of Douglas Fir, with John Minor, MT Feb. 89, p19-30